

Haufler, Proc. Roy. Soc. Edinburgh 86B:81–92, 1985; Haufler et al., Canad. J. Bot. 68:1855–1863, 1985; Lellinger, 1985). Fragile Fern is now known from nine counties: Allamakee Co., Peck 7845, ISTC; Clayton Co., Peck 76619, ISC; Delaware Co., Eilers 1814, IA; Fayette Co., Peck 76620, ISTC; Hardin Co., Farrar 1102, ISC; Howard Co., Peck 7861, ISTC; Jackson Co., Peck 76626, ISTC; Lyon Co., Farrar 1248, ISC; Winneshiek Co., Peck 87243, ISTC).

Cystopteris laurentiana (Weath.) Blasdell, is a North American endemic that occurs in northeastern North America, westward to the Great Lakes Region and southward into the Driftless Area (Peck, Contr. Milwaukee Pub. Mus. Geol. Biol. 53:1–143, 1982). It is a putative hybrid of *C. fragilis* (L.) Bernh. and *C. bulbifera* (L.) Bernh. that has undergone polyploidy to become a fertile hexaploid. In Iowa, *C. laurentiana* co-occurs with *C. bulbifera*, *C. fragilis*, *C. protrusa*, and *C. tenuis* on algific and north-facing, moist, sandstone outcrops. The small, dark, scaly, and abortive bulblets on *C. laurentiana* do not readily abscise, making this taxon easy to distinguish from its parents. It differs from *C. tennesseensis* Shaver by foliar morphology and its larger spore size. Based on re-examination of herbarium specimens and additional field work in 1987, this hybrid is now known from six counties in extreme northeastern Iowa: Allamakee Co., Peck 80624, ISTC; Clayton Co., Roosa 1814, ISTC; Dubuque Co., Peck 80617, ISTC; Howard Co., Eilers 2121, IA; Jackson Co., Peck 80607, ISTC; Winneshiek Co., Peck 87242, ISTC, Nekola sn., COE.

Lycopodium inundatum L., Bog Clubmoss, was discovered 17 July 1987 near Walker in extreme southern Buchanan Co. (Nekola sn., COE), disjunct 300 km to the west from populations of this species in Illinois and Wisconsin (Peck, Contr. Milwaukee Pub. Mus. Geol. Biol. 53:1–143, 1982). The population was found in vernal pools along a paha ridge crest of a vegetated sand dune currently being grazed. It was associated with species that are quite rare in Iowa and that were also reported with *L. inundatum* in abandoned sand pits in northeastern Illinois: *Hypericum gentianoides*, *Lechea intermedia*, *Polygala cruciata*, *Polygala polygama* var. *obtusata*, *Viola lanceolata*, and *Xyris torta* (Swink & Wilhelm, *Flora of Chicago region*, 1979). *Lycopodium inundatum* occurred only in areas with sparse cover. The microsite of the prostrate stems remains moist from seepage through summer and into autumn. By late September, the plants had released their spores (Peck 87003, ISTC).—JAMES H. PECK, Dept. Biology, University of Arkansas at Little Rock, Little Rock, Arkansas 72204, JEFFERY NEKOLA, Curriculum in Ecology, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina 27599; DONALD R. FARRAR, Dept. Botany, Iowa State University, Ames, Iowa 50011.

The Flavonoids of *Polystichum acrostichoides*.—Hiraoka (Biochem. Syst. Ecol. 6:171–175, 1978) reported flavonoids in the leaves of five species of *Polystichum*: *P. lepidocaulon*, *P. tsus-simense*, *P. craspedosorum*, *P. tripterum*, and *P. polyblepharum*. These flavonoids are O-glycosides of the flavonols kaempferol (3-glucoside, 7-arabinoside, 3-rhamnoglucoside, 3-diglucoside, and 3-rhamnoglucoside) and quercetin (3-glucoside and 3-rhamnoglucoside),

of Old World ferns. For Malaysia, this can be remedied by using the amply illustrated and highly informative book recently published by Audrey Piggott, whose husband provided the photographs and notes on photography under difficult tropical circumstances. And what photographs they are! Habitat shots, habit shots, individual fronds, and pinnae all abound.

A major chapter on principal vegetation types and fern habitats is like taking in a botanical travelogue. It is fine background for the main part of the book, in which nearly 80% of Malaysia's ferns (392 species) are treated. This is by no means a standard Flora, and so there are no keys. (One can rely on R. E. Holttum's *Flora of Malaya, vol. 2. Ferns* and its keys as a companion volume). Each species is listed under an up-to-date scientific name. Important synonyms are given, especially those used in Holttum's book. Habitat, distribution, and economic information are provided, as is a short, informal description. The figure legends are informative. One really can come to know the species through the illustrations; the habit shots are especially helpful in this regard. The book concludes with a brief glossary and an index.

This book is an unusual and fresh approach to the study of tropical ferns and belongs on the shelf of all who are interested in ferns: amateurs, growers, and professional botanists alike. It is available from U.S. book dealers, as well as from the publisher.—DAVID B. LELLINGER, U.S. National Herbarium NHB-166, Smithsonian Institution, Washington, DC 20560.

"A Nomenclatural Guide to R. H. Beddome's *Ferns of South India and Ferns of British India*," by S. Chandra and S. Kaur. 1987. x+139 pp. Today and Tomorrow's Printers and Publishers, 24-B/5 Original Road, Karol Bagh, New Delhi 110005, India. US \$15.00.

Colonel Beddome's quarto volumes, first published in the 1860's, remain unequalled for their clear and comprehensive drawings of Indian ferns. Although they are useful for identification purposes, the volumes have fallen into disuse over the years as waves of nomenclatural changes have obscured the scientific names applied to the plates by Beddome, especially names in the genera *Aspidium*, *Lastrea*, and *Nephrodium*. This has now been remedied by Chandra and Kaur's most useful book. Each of the plates in Beddome's volumes is listed in numerical order. Both Beddome's name and a modern equivalent are given, plus the basionym for the modern equivalent when that is appropriate. An index to both original and modern names concludes the volume. Anyone who has the original volumes will want this index. A 1983 reprint edition of *The ferns of Southern India* is available for US \$80.00 from the same publisher as Chandra and Kaur's book.—DAVID B. LELLINGER, U.S. National Herbarium NHB-166, Smithsonian Institution, Washington, DC 20560.